elicited in the past medical history of acquired bronchiectasis cases is against the acquired form of this disease.

The term "cystic disease of the lung" may be objected to on the basis of the fact that the dilated bronchi in this case appear to be air-containing rather than filled with fluid or semi-solid material which the term "cystic" may imply. To those objecting to the term "congenital cystic" disease of the lung in this case the synonyms atelectatic bronchiectasis or congenital bronchiectasis may seem to better describe the pathologic process.

At this time two months have elapsed since the patient entered the hospital. He states he feels well and as strong as usual. His admission weight was 124 pounds; his present weight is 130 pounds, which he regards as normal. He had no fever at the time of his admission and has been fever free since. The slight cough which he had on admission cleared up shortly after his entrance to the hospital. There has been no hemoptysis since the attack described in his present illness.

Reference to the fact that he enjoys boxing and frequently engages in this sport has been made in the history. Could trauma of the chest, such as might result from engaging in this sport, have contributed to the hemoptysis in the presence of such an underlying condition of the lung? No direct history of a traumatic basis for the hemoptysis could be obtained. It is believed that the evidence presented in this case is sufficient to warrant the diagnosis of congenital cystic disease of the lung.

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A CLOSED METHOD FOR DRAINING ACUTE EMPYEMA

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NO priority whatever is claimed for the following method of treating empyema. The originator of the method is not known to me nor have I been able to find a description of this technique in available literature. It was used during the recent war and proved so efficient at that time, and since, in civilian practice that a more widespread dissemination of its use would seem advisable.

Under intercostal block anesthesia one inch of the ninth rib in the postaxillary line is resected. With the index finger inserted into the pleural cavity as a guide, a trocar large enough to admit a No. 16 F. catheter is introduced through the intercostal space that lies in closest proximity to the upper surface of the diaphragm. The catheter is threaded into the pleural cavity and held in place by a single silkworm gut suture after removing the trocar. A firm rubber tube with a diameter of ten millimeters is retained in the primary thoracotomy opening by two silkworm gut sutures. Connections are then made, as shown in the diagram. (See Fig. 1.)

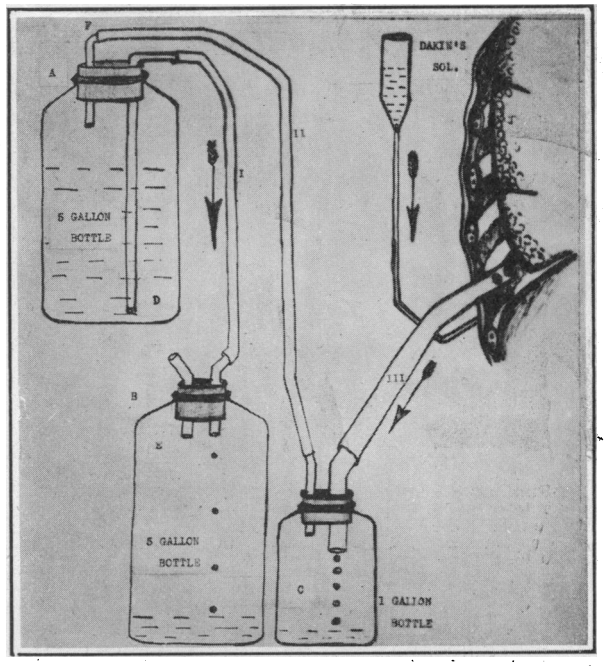

Fig. 1.—Diagram of apparatus used.

To start the apparatus to functioning, one blows into the glass tubing F until water begins to siphon from bottle A to bottle B. The attachment is then replaced. As water flows from bottle A to B negative pressure is produced in bottle A which is transmitted to the pleural space via bottle C and tubing III. This sucks out the pleural exudate which collects in bottle C, at the same time keeping the lung expanded.

Irrigation with Dakin's solution, either continuously or preferably at four to eight-hour intervals, is carried out by way of the catheter.

When the water in bottle A has been nearly exhausted a clamp is placed on tubings I and II, the stoppers withdrawn, and bottles A and B exchanged. To cleanse bottle C, clamp tubings II and III.

The amount of negative pressure obtained will vary in proportion to the distance the end of tubing D is above the end of tubing E and to a less extent on the height of the water level in bottle A. For all practical purposes if the distance between the bottom of bottles A and B is kept at eighteen inches sufficient negative pressure will be obtained and will be in the neighborhood of twenty millimeters of mercury.

Needless to say the success of the apparatus depends upon keeping the system relatively air-tight. A small amount of sterile gauze is placed over the incision and the area sealed over with

several layers of adhesive plaster. When working efficiently the rate of flow into bottle B will be from thirty to fifty drops per minute.

There is no age limit to the applicability of the method, though babies and children require more surveillance. Where this method of treatment has been instituted at the proper period the average length of time necessary for its employment has been two weeks. After removing the tubes the incision soon heals and x-rays show little, if any, lung collapse.

With this method, by which a considerable amount of negative pressure is continuously exerted on the lung, there is a greater likelihood of the lung expanding where there has been thickening of the visceral pleura than when simple air-tight drainage is used.

I also feel there is a distinct advantage over the introduction of intercostal drains, as the possibility of compression of the tube and lessening of its caliber between the ribs is not a factor when a portion of the rib has been resected. The amount of additional shock when local anesthesia is used is almost negligible.

While the apparatus may appear a bit cumbersome, in reality it is simple to assemble, easily procurable, works efficiently, and is comfortable for the patient.

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TUMORS OF THE CAROTID BODY*

REPORT OF CASE

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THE carotid body is not a new discovery. Its existence has been known since 1743, when when Von Holler found it and described its relations and macroscopic appearance. In 1862, one hundred and nineteen years later, Luschka noted its constant occurrence and made the first microscopic examination. It appears that Riegner, in 1880, was the first to remove a tumor of this gland. He called attention to the malignant tendency of such growths. Since 1891 up to the present time about one hundred cases have been reported by different surgeons, but not more than three have been reported by any one surgeon. In spite of the number of cases reported the clinical symptomatology, the etiology, and histologic characteristics are still more or less obscure.

THE CAROTID BODY

Nomenclature.—The exact nature of the gland or organ under discussion has been so uncertain that several different names have been given it, such as: intercarotid ganglion, Luschka's gland, intercarotid arterial glomerulus, carotid ganglion, and carotid body.

Anatomy.—When Von Holler stated over one hundred and eighty years ago that he found a nodule about the size of a kernel of wheat at the bifurcation of the common carotid artery, that it was set in the sympathetic nerve plexus around the artery and almost fused with its wall, and called it the intercarotid ganglion because he regarded it as a nerve structure. He little knew that at the present time his views, with a few modifications, would be confirmed.

Luschka's microscopic findings also have been substantiated of large cells in clusters surrounded by thin capillaries and sympathetic nerve fibers, which suggested to him their analogy to the adrenal bodies, the anterior lobe of the pituitary and other ductless glands. There has been, however, some disagreement among modern histologists in regard to the character of the cells and blood vessels, and the question of their close relationship with the nerve fibers.

The blood is supplied by three or four small arteries that enter at its lower pole. A corresponding number of veins leave at its upper pole. Its nerves are numerous and come from several sources among which are: the vagus, sympathetic, hypoglossal, and the glossopharyngeal.

Histology.—Dr. James Dawson reports the sections show irregularly arranged clumps and rows of cells occupying the interspaces within a close capillary network. The cells are fairly granular and when treated with chromic acid take the yellow color of "chromaffin" cells. The specific cells and endothelium probably share in the tumor process.

Physiology.—The function of the carotid body is not known. Experimentally its juice has been known to kill a rabbit in a few minutes, and small doses will depress the vascular system, which is just the opposite from the action of adrenalin. Bilateral removal of the organ has produced glycosuria and fatal cachexia. Undoubtedly the carotid belongs to the sympathetic ganglia.

Symptoms.—The symptoms are pressure symptoms such as: bruit and thrill, tinnitus aurium, harshness, cough and vocal cord paralysis from involvement of the sympathetics, dysphagia, and dysphonia.

Diagnosis.—The growth is almost always unilateral and occurs with equal frequency on the two sides of the neck and in male and female subjects. The following points are important in diagnosis: position at carotid bifurcation, smooth oval outline, mobility from side to side but not up and down, transmitted pulsations from carotid, slow growth (often many years), absence of any pain or tenderness with bulging of the pharyngeal wall.

The differential diagnosis should include consideration of the possibility of enlarged lymph glands, *i. e.,* cervical adenitis, gland metastasis as in carcinoma, Hodgkin's disease, bronchial cyst, syphilitic enlargement of glands, gummata, tuberculous glands, dermoids, and aneurysm.

Pathology.—Tumors of the carotid may be benign or malignant. The benign tumors are simple hyperplasia, adenoma, and angioma. The malig-

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